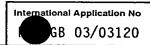
PATENT COOPERATION TREATY PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	(Form PCT/ISA/2	of Transmittal of International Search Report 20) as well as, where applicable, item 5 below.
NSP/P089167WO	ACTION	
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/GB 03/03120	17/07/2003	20/07/2002
Applicant		1 4.00
HEAT TRACE LIMITED		
This International Search Report has been according to Article 18. A copy is being tra	n prepared by this International Searching Autransmitted to the International Bureau.	nority and is transmitted to the applicant
This International Search Report consists	of a total of Sheets.	
1 1707	a copy of each prior art document cited in this	report.
Basis of the report	•	
With regard to the language, the language in which it was filed, unl	international search was carried out on the bas ess otherwise indicated under this item.	sis of the international application in the
the international search w Authority (Rule 23.1(b)).	as carried out on the basis of a translation of the	he international application furnished to this
b. With regard to any nucleotide an was carried out on the basis of the	d/or amino acid sequence disclosed in the in e sequence listing :	ternational application, the international search
· ·	nal application in written form.	
filed together with the inte	rnational application in computer readable form	n.
furnished subsequently to	this Authority in written form.	
furnished subsequently to	this Authority in computer readble form.	
the statement that the sub- international application a	sequently furnished written sequence listing d s filed has been furnished.	oes not go beyond the disclosure in the
the statement that the info furnished	ormation recorded in computer readable form is	s identical to the written sequence listing has been
2. Certain claims were fou	nd unsearchable (See Box I).	
3. Unity of invention is lack	king (see Box II).	
4. With regard to the title		
4. With regard to the title , The text is approved as su	hmitted by the applicant	
	hed by this Authority to read as follows:	
	•	·
5. With regard to the abstract,	harthand har the mouth and a sign of	
the text is approved as su the text has been establis within one month from the	omitted by the applicant. hed, according to Rule 38.2(b), by this Authoric date of mailing of this international search rep	ty as it appears in Box III. The applicant may, port, submit comments to this Authority.
6. The figure of the drawings to be publ	ished with the abstract is Figure No.	2
as suggested by the appli	cant.	None of the figures.
because the applicant faile	ed to suggest a figure.	
because this figure better	characterizes the invention.	



A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H05B3/56 H05B3/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) $IPC \quad 7 \qquad H05B$

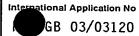
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Α	US 4 721 848 A (MALONE NEIL S ET AL) 26 January 1988 (1988-01-26) column 4, line 40 -column 5, line 49; figure 2 column 6, line 23-31	1-6
Α	US 4 659 913 A (MIDGLEY JOHN A ET AL) 21 April 1987 (1987-04-21) column 4, line 27 -column 5, line 6; figures 4-6 column 6, line 23-31	1-6
A	EP 1 199 727 A (HEAT TRACE LTD) 24 April 2002 (2002-04-24) paragraphs '0015!,'0016!; figures 1,2/	1-6

Further documents are listed in the continuation of box C:	Y Patent family members are listed in annex.
 Special categories of cited documents: 'A' document defining the general state of the art which is not considered to be of particular relevance 'E' earlier document but published on or after the international filing date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filing date but later than the priority date claimed 	 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 'Y' document of particular relevance; the claimed Invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. '&' document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
13 October 2003	29/10/2003
Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Gea Haupt, M



		GB 03/03120
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 168 580 A (SUNBEAM CORP) 18 June 1986 (1986-06-18) page 2, line 31 - line 76; figures 2,3	1-6
A	US 6 005 232 A (JANVRIN ARON K ET AL) 21 December 1999 (1999-12-21) column 6, line 33-43; figures 1,2,6	1-6
A	US 4 459 473 A (KAMATH HUNDI P) 10 July 1984 (1984-07-10) column 7, line 54 -column 8, line 15; figures 1,2	1-6
A	EP 0 809 417 A (SUNBEAM PRODUCTS INC) 26 November 1997 (1997-11-26) page 1, line 55 -page 2, line 20; figures 1,1A,2,2A,3,3A	1-6
		·
ĺ		
	•	
İ		
	V = 99	
1		

rmation on patent family members

International Application No.
P 48 03/03120

						r ab	03/03120
	Patent document cited in search report		Publication date		Patent family member(s)		Publication date
	US 4721848	A	26-01-1988	AU CA EP WO IN JP KR	58145 463098 125214 019103 860106 16548 6150291 940652	5 A 2 A1 8 A1 4 A1 3 A1 8 T	23-02-1989 25-02-1986 04-04-1989 20-08-1986 13-02-1986 28-10-1989 11-12-1986 21-07-1994
	US 4659913	A	21-04-1987	US AT CA DE DE EP GB HK JP JP KR US	479127 7752 120736 338258 338258 009240 211881 216333 3938 3958 15915 182898 502631 5906369 910427 458298 457418	7 J 6 A1 1 D1 1 T2 6 A2 0 A ,B 0 A ,B 8 A 8 A 3 A1 7 C 6 B 0 A 5 B1 3 A	13-12-1988 15-07-1992 08-07-1986 23-07-1992 02-03-1995 26-10-1983 02-11-1983 19-02-1986 03-06-1988 03-06-1988 04-04-1987 15-03-1994 15-04-1993 11-04-1984 25-06-1991 -15-04-1986 04-03-1986
	EP 1199727	Α	24-04-2002	CA EP US	235929 119972 200207432	7 A2	19-04-2002 24-04-2002 20-06-2002
	GB 2168580	Α	18-06-1986	AU AU CA DE FR JP NZ	57485 491198 124486 354115 257461 6113848 21329	5 A 3 A1 1 A1 2 A1 5 A	14-07-1988 12-06-1986 15-11-1988 16-10-1986 13-06-1986 25-06-1986 26-04-1989
	US 6005232	Α	21-12-1999	CA EP KR NO WO	226018 101632 200002226 98609 980101	î Aî 9 A 7 A	08-01-1998 05-07-2000 25-04-2000 25-02-1999 08-01-1998
,	US 4459473	A	10-07-1984	AT AU CA DE DK EP ES FI GB HK IN JP	009649 28113	7 B2 3 A 8 A1 5 D1 3 A ,B, 2 A1 0 U 2 A ,B, 9 A ,B	15-11-1987 09-10-1986 24-11-1983 22-07-1986 17-12-1987 22-11-1983 21-12-1983 16-10-1985 22-11-1983 07-12-1983 27-10-1989 04-04-1987 22-11-1994

mation on patent family members

International Application No
PB 03/03120

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4459473	A	<u></u> -	JP	6007509 B	26-01-1994
			JP	58214295 A	13-12-1983
			KR	9100829 B1	09-02-1991
			MX	158292 A	20-01-1989
			NO	831815 A ,B,	22-11-1983
			SG	89588 G	01-09-1989
EP 0809417	Α	26-11-1997	 US	5801914 A	01-09-1998
			ΑÜ	2357597 A	27-11-1997
			CA	2205819 A1	23-11-1997
			CN	1170261 A ,B	14-01-1998
			ĒΡ	0809417 A2	26-11-1997
			JP	3023332 B2	21-03-2000
			JP	10144192 A	29-05-1998